

Recent Publications of the USGS Contaminant Biology Program

January 2006- January 2008

59th Report of the Toxic Substances Control Act Interagency Testing Committee. 2007.
Federal Register. 72:2756-2761.

60th Report of the Toxic Substance Control Act Interagency Testing Committee. 2007.
Federal Register 72:41414-41418.

Ackerman, J.T., Eagles-Smith, C.A., Takekawa, J.Y., Demers,S.A., Adelsbach,T.L.,
Bluso, J.D., Miles, A.K., Warnocke, N., Suchanek, T.H., and Schwarzbach, S.E.,
2007. Mercury concentrations and space use of pre-breeding American avocets
and black-necked stilts in San Francisco Bay. *Science of The Total Environment*
384(1-3):452-466

Allert, A.L., Fairchild, J.F., DiStefano,R.J., Schmitt,C.J., Besser, J.M., Brumbaugh,
W.G., Poulton, B.C. 2008. Effects of lead-zinc mining on crayfish (*Orconectes*
hylas) in the Black River watershed, Missouri, USA. *Crayfish*: 16, (In Press)

Allert, A.L., Fairchild, J.F., May, T.W., Sappington, L.C., 2006, Using on-site
bioassays to determine selenium risk to propagated endangered fishes: North
American Journal of Fisheries Management, 26: 308-316

Alvarez, D.A., Huckins, J.N., Petty, J.D., Jones-Lepp,T.L., Stuer-Lauridsen, F., Getting,
D.T., Goddard, J.P., and Gravell, A. 2007. Tool for Monitoring Hydrophilic
Contaminants in Water: Polar Organic Chemical Integrative Sampler (POCIS). In
R. Greenwood, G. Mills, B. Vrana (eds) *Passive Sampling Techniques*.
Comprehensive Analytical Chemistry. 48:171-197

Alvarez, D.A., Perkins, S.D., 2006, Determining the presence and potential estrogenic
and androgenic activity of chemicals sequestered by Pocis in the Golden Gate
National Park: Final Report the the U.S. Geological Survey, Western Ecological
Research Center, Dixon, CA

Anderson, B., Hunt, J., Phillips, B., Thompson, B., Lowe, S., Taberski, K., and Carr, R.S. 2007. Patterns and trends in sediment toxicity in the San Francisco Estuary. Environ. Res. 105:145–155

Ankley, G.T., Daston, G., Degitz,S., Denslow, N., Hoke, R. Kennedy, S., Miracle, A., Perkins, E., Snape, J., Tillitt, D. Tyler, C., and Versteeg, D. 2006. Toxicogenomics in regulatory ecotoxicology: Potential applications and practical challenges. Environ. Sci. Technol. 40(13): 4055-4065

Anteau, M.J., Afton, A. D., Custer, C.M., and Custer, T.W. 2007. Relationships of cadmium, mercury, and selenium with nutrient reserves of female lesser scaup (*Aythya affinis*) during winter and spring migration. Environmental Toxicology and Chemistry 26:515-520.

Arzuaga, X., Wassenberg, D., Di Giulio, R., Elskus, A. 2006. The chlorinated AHR ligand 3,3',4,4',5-pentachlorobiphenyl (PCB126) promotes reactive oxygen species (ROS) production during embryonic development in the killifish (*Fundulus heteroclitus*). Aquatic Toxicology 76(1):13-23.

Augspurger, T., Dwyer, F.J., Ingersoll, C.G., Kane, C.M., 2007. Editorial: Advances and opportunities in assessing the contaminant sensitivity of freshwater mussel early life stages. Environmental Toxicology and Chemistry 26:2025-2028

Baldigo, B.P., Sloan, R.J., Smith, S.B., Denslow, N.D., Blazer, V.S. and T.S. Gross. 2006. Polychlorinated biphenyls, mercury, and potential endocrine disruption in fish from the Hudson River, New York, USA. Aquatic Sciences 68: 206.228.

Besser, J.M., Brumbaugh, W.G., May, T.W., Schmitt, C.J. 2007. Biomonitoring of lead, zinc, and cadmium in streams draining lead-mining and non-mining areas of southeast Missouri, USA. Environmental Monitoring and Assessment: 129(1-3):227-41. Epub 2006 Sep 7.

Besser, J.M., Mebane,C.A., Mount, D.R., Ivey, C.D., KunzJ.L., GreerI.E., May,T.W. and Ingersoll,C.G. 2007. Sensitivity of mottled sculpins (*Cottus bairdi*) and rainbow trout (*Onchorhynchus mykiss*) to acute and chronic toxicity of cadmium, copper, and zinc. Environmental Toxicology Chemistry 26: 1657–1665

Beyer, W. N., Gaston, G., Brazzle, R., O'Connell, A.F., Jr., and Audet, D. J. 2007. Deer exposed to exceptionally high concentrations of lead near the continental mine in Idaho, USA. *Environmental Toxicology and Chemistry* 26(5):1040-1046.

Blazer, V.S. Iwanowicz, L.R., Iwanowicz, D.D., Smith, D.R., Young, J.A., Hedrick, J. D., Foster, S. W., Reeser, S. J. 2007. Intersex (testicular oocytes) in smallmouth bass (*Micropterus dolomieu*) From the Potomac River and selected nearby drainages. *Journal of Aquatic Animal Health.* 19(4);242–253

Blazer, V.S., Fournie, J.W., Wolf, J.C., and Wolfe, M.J. 2006. Diagnostic criteria of proliferative hepatic lesions in the brown bullhead *Ameiurus nebulosus*. *Diseases of Aquatic Organisms* 72:19-30.

Blazer, V.S., Iwanowicz, L.R. and Baumann, P.C. 2006. Final Report: Fish health study Ashtabula River natural resource damage assessment. USGS, National Fish Health Research Laboratory. January 2006. 57pp.

Boone, M.D. and Bridges-Britton, C.M. 2006. Examining multiple sublethal contaminants on the gray tree frog (*Hyla Vesicolor*): Effects of an insecticide, herbicide, and fertilizer. *Environmental Toxicology and Chemistry.* 25:3261-3265

Boone, M.D., C.M. Bridges, J.F. Fairchild and Little, E.E. 2005. Multiple sublethal chemicals negatively affect tadpoles of the green frog, *Rana clamatans*. *Environmental Toxicology and Chemistry* 24:1267-1272.

Boone, M.D., Semlitsch, R.D., Little, E.E., and Doyle, M.C. 2007. Multiple stressors in amphibian communities: Effects of chemical contaminants, bullfrogs, and fish. *Ecological Applications* 17:291-301

Bowen, L., Aldridge, B.M., Miles, A.K. Stott, J.L. 2006. Expressed MHC class II genes in sea otters (*Enhydra lutris*) from geographically disparate populations. *Tissue Antigens* 67 (5), 402–408.

Bowen, L., Federica, R., Mohr, C., Aldridge, B., Schwartz, J., Miles, A.K., and Stott, J.L. 2007. Differential Gene Expression Induced by Exposure of Captive Mink to Fuel Oil: A Model for the Sea Otter. *Ecohealth* 4(3):298-309.

Bridges, C.M., and Little, E.E. 2005. Toxicity to amphibians of environmental extracts from natural waters in National Parks and Fish and Wildlife Refuges. *Alytes*, 22:130-145.

Brumbaugh, W.G., May, T.W., Besser, J.M., Allert, A.L. and Schmitt, C.J. 2007. Assessment of elemental concentrations in streams of the New Lead Belt in Southeastern Missouri, 2002-05. U.S. Geological Survey, Scientific Investigations Report 2007-5057.

Bryan, J.L., Wildhaber, M.L., Papoulias, D.M., DeLonay, A.J., Tillitt, D.E., Annis, M.L. 2007. Estimation of gonad volume, fecundity, and reproductive stage of shovelnose sturgeon using sonography and endoscopy with application to the endangered pallid sturgeon. *Journal of Applied Ichthyology* 23 (4):411–419.

Buhl, K., 2006, Relative Toxicity of Product Number (FlameOut, Summit Environmental Corporation, Longview, TX) to Early Life Stages of Rainbow Trout., USGS02-RBT96-01

Burgess, R.J., Sharma,C., Montagna, P., and Carr, R.S. 2005. Assessment of storm water outfalls in Corpus Christi Bay, Texas, USA using meiofauna. *Meiofauna Marina* 14:157-169.

Bursian, S.J., Sharma, C., Aulerich, R. Yamini, J.B., Mitchell, R.R., Beckett, K.J., Orazio, C.E., Moore, D., Svirsky, S., and Tillitt, D.E. 2006. Dietary exposure of mink (*Mustela vison*) to fish from the Housatonic River, Berkshire County, MA, USA: Effects on organ weights and histology and hepatic concentrations of polychlorinated biphenyls and 2,3,7,8-tetrachlorodibenzo-p-dioxin toxic equivalents. *Environ. Toxicol. Chem.* 25(6):1541-1550.

Bursian, S.J., Sharma, C., Aulerich, R. Yamini, J.B., Mitchell, R.R., Beckett, K.J., Orazio, C.E., Moore, D., Svirsky, S., and Tillitt, D.E. 2006. Dietary exposure of mink (*Mustela vison*) to fish from the Housatonic River, Berkshire County, Massachusetts, USA: Effects on reproduction, kit growth and survival. *Environ. Toxicol. Chem.* 25(6):1533-1540.

Buscemi, D. M., Hoffman, D. J., Vyas,N. B., Spann, J. W., and Kuenzel, W. J. 2007. Effects of Phos-Chek® G75-F and Silv-Ex® on red-winged blackbird (*Agelaius phoeniceus*) embryos. *Environmental Pollution* 148(1):312-315.

Carr, R.S. 2006. Assessment of toxicity in Antarctic marine sediments. In: Practical Biological Indicators of Human Impacts in Antarctica, vol. 2, Richmond Printing LLC, Houston, Texas, pp. 65-69.
<http://vpr.tamu.edu/antarctic/workshop/presentations.php>

Carr, R.S. 2007. Final Report on methods comparison and toxicity testing of sediments from Boundary Bay, Bellingham Bay and Samish Bay, Washington PSAMP 2006. Submitted to Washington State Department of Ecology, Puget Sound Assessment and Monitoring Program, Olympia, Washington.

Carr, R.S. and Nipper, M. 2008. Measurements of toxicity in reef sediment. In: Molokai Atlas, USGS Publication XXX, pp. XXX-XXX ((In Press))

Carr, R.S., Biedenbach, J.M., and Nipper, M. 2006. Influence of ammonia, pH, dissolved organic carbon and other potentially confounding factors on sea urchin porewater toxicity tests. Archives of Environmental Contamination and Toxicology (in press).

<http://www.springerlink.com/content/d6237uj1q6233432/fulltext.html>

Carr, R.S., Nipper, M., Field, M., Biedenbach, J.M., 2006, Sedimentation and circulation in Hanalei Bay: Studies of sediment toxicity: U.S. Geological Survey, Open File Report 2006- (91412)

Chu, S., Henny, C.J., Kaiser, J.L., Drouillard, K.G., Haffner G.D., Letcher, R.J. 2007. Dachtal and chlorophenoxy herbicides and chlorothalonil fungicide in eggs of Osprey (*Pandion haliaetus*) from the Duwamish, Lake Washington, Puget Sound area of Washington State. Environmental Pollution 145:374-381.

Chuiko, G.M., Tillitt, D.E., Zajicek, J.L., Flerov, B.A., Stepanova, V.M., Zhelnin, Y.Y., and Podogornaya, V.A. 2007. Chemical contamination of the Rybinsk Reservoir, Northwest Russia. Part 1. Polychlorinated biphenyl (PCB) content and health indicators in bream (*Abramis brama*). Chemosphere 67:527-536

Cobos, V.M., Mora, M.A. and Escalona G. 2006. Inhibición de colinesterasa plasmática en el zorzal pardo (*Turuds grayi*), expuesto a diazinón en cultivos de papaya maradol en Yucatán, Mexico (Plasma cholinesterase inhibition in the clay-colored robin (*Turdus grayi*) exposed to diazinon in maradol papaya crops in Yucatan, Mexico). Revista de Toxicología 23:9-14.

Cranor, W.L., Gale, R.W., Meadows, J.C., Peterman, P.H., Perkins, S.D., Clark, R.C., Tegerdine, G.A., 2006, Analysis of SPMD samples from the December 2004 deployment in Bluestone River, VA for PCBs as bioavailable organic contaminants: Final report to the VA Department of Environmental Quality, Office of Water Quality, Richmond, VA (91402)

- Custer, C.M., and Read, L.B. 2006. Polychlorinated biphenyl congener patterns in tree swallow (*Tachycineta bicolor*) nesting along the Housatonic River, western Massachusetts, USA 2006. Environmental Pollution 142:235-245.
- Custer, C.M., Custer, T.W., and Hill, E.F. 2007. Mercury exposure and effects of cavity-nesting birds from the Carson River, Nevada. Archives of Environmental Contamination and Toxicology 52:129-136.
- Custer, C.M., Custer, T.W., Hines, J.E., Nichols, J.D., and Dummer, P.M. 2007. Adult tree swallow (*Tachycineta bicolor*) survival on the PCB-contaminated Housatonic River, MA. Environmental Toxicology and Chemistry 26:1056-1065.
- Custer, C.M., Custer, T.W., Warburton, D., Hoffman, D.J., Bickham, J., and Matson, C.W. 2006. Trace element concentrations and bioindicator response in tree swallows from northwestern Minnesota. Environmental Monitoring and Assessment 118:247-266.
- Custer, T.W., Custer, C.M., Goatcher, B., Melancon, M.J., Matson, C.W., and Bickham, J.W. 2006. Contaminant exposure of barn swallows nesting on Bayou D'Inde, Calcasieu Estuary, Louisiana USA. Environmental Monitoring and Assessment 121: 543-560.
- Custer, T.W., Dummer, P.M., Custer, C.M., Warburton, D., Melancon, M.J., Hoffman, D.J., Matson, C.W., and Bickham, J.W., 2007, Water level management and contaminant exposure to tree swallows nesting on the Upper Mississippi River: Environmental Monitoring and Assessment. 133(1-3):335-345
- Elliott, J.E., Morrissey, C.A., Henny, C.J., Ruelas Inzunza, E., Shaw, P., 2007, Satellite telemetry and prey sampling reveal contaminant sources to Pacific Northwest ospreys: Ecological Applications, 17(4):1223-1233
- Elskus, A.A., Collier, T.K., Monosson, E. 2005. Interactions between lipids and persistent organic pollutants in fish [Pages 119-152]. in: Mommsen TP, Moon TW, editors. Environmental Toxicology. Boston, MA: Elsevier. Biochemistry and Molecular Biology of Fishes ; Volume 6).
- Engler, R.M., Long, E.R., Swartz, R.C., Di Toro, D.M., Ingersoll, C.G., Burgess, R., Gries, T.H., Berry, W.J., Burton, G.A., O'Connor, T.P., Chapman, P.M., Field, J.L., Poreski, L.M. 2005. Chronology of sediment quality assessment methods in

the United States. In: Wenning, R.J., Batley G, Ingersoll, C.G., Moore, D.W., editors. Use of sediment quality guidelines and related tools for the assessment of contaminated sediments. Pensacola FL: SETAC Press, p. 311-343.

Farag, A.M., Harper, D.D., Cleveland, L., Brumbaugh, W.G., Little, E.E. 2006. The potential for chromium to affect the fertilization process of Chinook salmon (*Oncorhynchus tshawytscha*) in the Hanford reach of the Columbia River, Washington, USA. Archives of Environmental Contamination and Toxicology. 50(4):575-9.

Farag, A.M., Kimball, B.A., Nimick, D.A., Church, S.E., Harper, D.D. and Brumbaugh, W.G. 2007. Concentrations of Metals in Water, Sediment, Biofilm, Benthic Macroinvertebrates, and Fish in the Boulder River Watershed, Montana and the Role of Colloids in Metal Uptake. Archives of Environmental Toxicology and Chemistry 52(3):397-409.

Farag, A.M., May, T., Marty, G.D., Easton M., Harper, D.D., Little, E. E., and Cleveland, L. 2006. The effect of chronic chromium exposure on the health of Chinook salmon (*Oncorhynchus tshawytscha*). Aquatic Toxicology 76:246-257.

Farag, A.M., Nimick, D.A., Kimball, B.A., Church, S.E., Skaar, D., and Brumbaugh, W.G., McConnell, Elizabeth, and Hogstrand, Christer,, Aquatic health and exposure pathways of trace elements, chap. D10 of Nimick, D.A., Church, S.E., and Finger, S.E., eds., Integrated investigations of environmental effects of historical mining in the Basin and Boulder mining districts, Boulder River watershed, Jefferson County, Montana: U.S. Geological Survey Professional Paper 1652 (In Press)

Franson, J.C., Hoffman, D.J., Wells-Berlin, A., Perry, M.C., Shearn-Bochsler, V., Finley, D.L., Flint, P.L., and Hollmén, T. 2007. Effects of dietary selenium on tissue concentrations, pathology, oxidative stress, and immune function in common eiders (*Somateria mollissima*). Journal of Toxicology and Environmental Health, Part A 70(10):861-874. [click VIEW for abstract]

Furman, O., Strawn, D.G., Heinz, G.H. and Williams, B. 2006. Risk assessment test for lead bioaccessibility to waterfowl in mine-impacted soils. Journal of Environmental Quality 35:450-458.

Garrison, V.H., Carr, R.S., Foreman, W.T, Genualds, S. Griffin, D.W., Kellogg, C.A. Majewski, M.S., Mohammed,A., Nipper, M., Shinn, E.A., Simonich, S.L., and

Smith,G.W. 2006. Saharan dust and the degradation of Caribbean coral reefs – preliminary evidence of a link. *Revista Biologia Tropical* (in press).

Gillette, D.P., Tiemann, J. Edds, D.R., and Wildhaber, M.L. 2006. Habitat use by midwestern U.S.A. fish assemblage: effects of season, water temperature and river discharge. *Journal of Fish Biology* 68:1494-1512.

Grove, R.A. 2006. Environmental contaminants in male river otters collected from Oregon and Washington, 1994-1999, with reproductive organ hypoplasia observed in otter males. PhD Dissertation: Corvallis, OR, Oregon State University, p. 320.

Harding, A.K., Daston, G.P., Boyd, G.R., Lucier, G.W., Safe, S.H., Stewart, J., Tillitt, D.E., Van Der Kraak, G., 2006, Endocrine disrupting chemicals research program of the U.S. Environmental Protection Agency: Summary of a Peer-review report: *Environmental Health Perspectives*, 14(8): 1276-1282 (91471)

Harper, D.D., Farag, A.M., Brumbaugh,W.G. 2007. Effects of Acclimation on the Toxicity of Stream Water Contaminated with Zinc and Cadmium to Juvenile Cutthroat Trout. *Archives of Environmental Contamination and Toxicology* 2007 Oct 3

Haynes, S. 2006, Spatial variation and biological indicators of total mercury concentrations in alligators, largemouth bass, and pig frogs in the Everglades ecosystem, USGS (Dissertation)

Haynes,S., Gragg, R.D., Johnson, E., Robinson, L., Orazio, C. 2006. An Evaluation of a Reagentless Method for the Determination of Total Mercury in Aquatic Life. *Water, Air, & Soil Pollution*, 172:359-374

Heinz, G.H., Hoffman, D.J., Kondrad, S.K., and Erwin, C. A. 2006. Factors affecting the toxicity of methylmercury injected into eggs. *Archives of Environmental Contamination and Toxicology* 50:264-279.

Henny, C.J., Elliott, J.E., 2007, Chapter 18, Toxicology, In Raptor Research and Management Techniques, Second Edition, Blaine, WA, Hancock House.

Henny, C.J., Hill, E.F., Grove, R.A., Kaiser, J.L., 2007. Mercury and drought along the lower Carson River, Nevada - I. Snowy egret and black-crowned night-heron annual exposure to mercury, 1997-2006: *Archives of Environmental Contamination and Toxicology*, 53:269-280. Epub 2007 Jun 11.

Henny, C.J., Kaiser, J.L., Grove, E.F., 2007. Persistent bioaccumulative toxics (PBTs) in Osprey. Contributed Article, pp.156-158 in 2007 Puget Sound Update: Ninth Report of the Puget Sound Assessment and Monitoring Program. Puget Sound Action Team. Olympia, WA. 260pp.

Henny, C.J., Kaiser, J.L., Grove, R.A. 2006. Ospreys as Indicator Species. Contributed Article, Puget Sound Update 2006: Ninth Report of the Puget Sound Assessment and Monitoring Program. Puget Sound Action Team. Olympia, WA. (Report on the status and trends, monitoring and research activities in the Puget Sound released in conjunction with the Puget Sound Action Teams indicator report: the State of the Sound, November 2006).

Henny, C.J., Kaiser, J.L., Grove, R.A., 2006, Evaluation of the Osprey as a sentinel species for monitoring contaminant exposure and effects along large rivers, bays and estuaries: iWhite Paperí prepared for Biomonitoring of Environmental Status and Trends (BEST) Program, Fort Collins, CO, p.4.

Henny, C.J.,Grove,R.A., Kaiser, J.L. 2007. Osprey Distribution, Abundance, Reproductive Success and Contaminant Burdens Along Lower Columbia River, 1997/1998 Versus 2004. Arch Environ Contam Toxicol. Epub

Hinck J.E., Schmitt, C.J., Echols, K.R., May, T.W., Orazio, C.E., and Tillitt, D.E. 2006. Environmental contaminants in fish and their associated risk to piscivorous wildlife in the Yukon River Basin, Alaska. Archives of Environmental Contamination and Toxicology 51:661-672

Hinck JE, Schmitt, C.J., Blazer, V.B., Denslow, N.D., Bartish,T.M., Anderson, P. J., Coyle,J.J. Dethloff, G.M., and Tillitt, D.E. 2006. Environmental contaminants and biomarker responses in fish from the Columbia River and its tributaries: Spatial and temporal trends. Science of the Total Environment, v. 366, p. 549-478.

Hinck, J.E., Blazer, V.B., Denslow, N.D., K.E. Echols, Gross, T.S., May, T.W., Anderson, P.J., Coyle, J.J., and Tillitt, D.E. 2007. Spatial trends of environmental contaminants, health indicators, and reproductive biomarker responses in fish from the Colorado River and its tributaries. Science of the Total Environment. 378:376-402

Hinck, J.E., Blazer, V.S., Denslow, N.D., Echols, K.R., Gale, R.W., Wieser, C., May, T.W., Ellersieck, M., Coyle, J.J., and Tillitt, D.E. Chemical contaminants, health

indicators, and reproductive biomarker responses in fish from rivers in the Southeastern United States. *Science of The Total Environment* 390:538-557

Hinck, J.E., Blazer, V.S., Denslow, N.D., Gross, T.S., Echols, K.R., Davis, A.P., May, T.W., Orazio, C.E., Coyle, J.J., Tillitt, D.E., 2006, Biomonitoring of Environmental Status and Trends (BEST) Program: Environmental contaminants, health indicators, and reproductive biomarker in fish from the Colorado River Basin: U.S. Geological Survey, Scientific Investigations Report 2006-5163 (91466)

Hinck, J.E., Blazer, V.S., Denslow, N.D., Myers, M.S., Gross, T.S., and Tillitt, D.E. 2007. Biomarkers of contaminant exposure in northern pike (*Esox lucius*) from the Yukon River Basin, Alaska. *Arch. Environ. Toxicol. Chem.* 52:549-562

Hoffman D.J., Heinz G.H., Audet D.J. 2006. Phosphorus amendment reduces hematological effects of lead in mallards ingesting contaminated sediments. *Archives of Environmental Contamination and Toxicology* 50:421-428.

Hoffman D.J., Heinz G.H., Audet D.J. 2006. Phosphorus amendment reduces hematological effects of lead-contaminated sediment to mallards. *Archives of Environmental Contamination and Toxicology* 50:421-428.

Hoffman D.J., Heinz G.H., Audet D.J. 2006. Phosphorus amendment reduces hepatic and renal oxidative stress in mallards ingesting lead-contaminated sediments. *J. Toxicol. Environ. Health, Part A*, 69:1039-1053.

Hothem, R.L., Crayon, J.J., and Law, M.A. 2006. Effects of Contaminants on Reproductive Success of Aquatic Birds Nesting at Edwards Air Force Base, California, *Archives of Environmental Contamination and Toxicology* 51(4):711-719

Hothem, R.L., Trejo, B.S., Bauer, M.L., and Crayon, J.J. In Press. Cliff swallows *Petrochelidon pyrrhonota* as bioindicators of environmental mercury, Cache Creek Watershed, California. *Archives of Environmental Contamination and Toxicology*.

Huang, Y.-W., Hoffman, D.J., and Karasov, W.H. 2007. Oxidative stress induced in PCB 126-exposed northern leopard frogs, *Rana pipiens*. *Journal of Toxicology and Environmental Health - Part A* 70(8):676-681.

Ingersoll, C.G. 2005. Editorial. Mentoring early career professionals in the Society of Toxicology and Chemistry North America (SETAC NA). Environmental Toxicology and Chemistry 24:2715-2716.

Ingersoll, C.G. 2007. Expert report on the development and application of sediment quality guidelines to assess the toxicity of metals in sediment. Prepared for the U.S. Department of Justice and U.S. Department of the Interior, July 2007

Ingersoll, C.G., Augspurger, T., Barnhart, C., Bidwell, J., Bishop, C., Black, M., Cope, G., Bringolf, R., Dwyer, F.J., Greer, I.E., Keller, A., Linder, G., Neves, R., Newton, T., Pepin, R., Roberts, A., Roberts, C., Salazar, M., Same, A., Stephan, C., Van Hassel, J., Wang ,N., Watters, T. 2005. ASTM International standard guide for conducting laboratory toxicity tests with freshwater mussels (E2455-05). Annual Book of ASTM Standards Volume 11.05, West Conshohocken, PA.

Ingersoll, C.G., Augspurger, T., Barnhart, C., Bidwell, J., Bishop, C., Black, M., Cope, G., Bringolf, R., Dwyer, F.J., Greer, I.E., Keller, A., Linder, G., Neves, R., Newton, T., Pepin, R., Roberts, A., Roberts, C., Salazar, M., Samel, A., Stephan, C., Van Hassel, J., Wang, N., Watters, T. 2006. Revision to ASTM International standard guide for conducting laboratory toxicity tests with freshwater mussels (E2455-06). Annual Book of ASTM Standards Volume 11.06, West Conshohocken, PA

Ingersoll, C.G., Kernaghan, N.J., Gross, T.S., Milam, C., Wang, N., Roberts, A. 2006. Laboratory Toxicity Testing with Freshwater Unionid Mussels. In: Farris, J. L., Van Hassel, J. H. 2006. Freshwater Bivalve Ecotoxicology. Pensacola (FL): SETAC Press, p 95-134

Ingersoll, C.G., Kernaghan, N.J., Gross, T.S., Milam, C., Wang, N., Roberts, A. 2006. Laboratory toxicity testing with freshwater unionid mussels. P.95-129 In: Farris JL, Van Hassel JH. 2006. Freshwater bivalve ecotoxicology. Pensacola (FL): SETAC Press: 289 pp.

Ingersoll, C.G., Wang, N., Hayward, J.M.R., Jones, J.R., Jones, S. 2005. A field assessment of long-term laboratory sediment toxicity tests with the amphipod *Hyalella azteca*. Environmental Toxicology and Chemistry 24:2853-2870.

Iwanowicz, L.R. and Ottinger, C.A. 2007. Estrogens, Estrogen Receptors and Their Role as Immunoregulators in Fish. In Zaccone, G., M.J. Manning, C.J. Secombes,

and B.G. Kapoor, editors. Fish Defenses, Vol. 1: Immunology. Science Publishers.
In Press

James, S.M., Little, E. E., Semlitsch, R.D. 2005. Metamorphosis of two amphibian species after chronic cadmium exposure in outdoor aquatic mesocosms. Environmental Toxicology and Chemistry 24:1994-2001.

Jørgensen, EH., Vijayan, M.M., Killie, J.A., Aluru,N. Aas-Hansen,Ø., Maule, A. 2006. Toxicokinetics and Effects of PCBs in Arctic Fish: A Review of Studies on Arctic Charr. Journal of Toxicology and Environmental Health, Part A- 69:37-52

Karasov, W. H., Kenow, K. P., Meyer, M. W., and Fournier, F., 2007, Bioenergetic and pharmacokinetic model for exposure of common loon (*Gavia immer*) chicks to methylmercury: Environmental Toxicology and Chemistry 26(4):677-685.

Kenow, K. P., Grasman, K. A., Hines, R. K., Meyer, M. W., Gendron-Fitzpatrick, A., Spalding, M G., and Gray, B. R., 2007, Effects of methylmercury exposure on the immune function of juvenile common loons (*Gavia immer*): Environmental Toxicology and Chemistry 26(7):1460-1469.

Kenow, K.P., Meyer, M.W., Hines, R.K., and Karasov, W.H. 2007, Distribution and accumulation of mercury in tissues of captive-reared common loon (*Gavia immer*) chicks: Environmental Toxicology and Chemistry 26(5):1047-1055.

Lasier, P.J., Winger, P.V., Hardin, I.R. 2006. Effects of hardness and alkalinity in culture and test waters on reproduction of *Ceriodaphnia dubia*. Environmental Toxicology and Chemistry 25(10): 2781–2786

Lastrupup, M. S., Jacobson, R.B., and Simpkins, D.G. 2007. Distribution of potential spawning habitat for sturgeon in the lower Missouri River, 2003-06. U.S. Geological Survey, Open File Report 2007-1192.

Lavoie, E.T., Wiley, F., Grasman, K.A., Tillitt, D.E., Sikarskie, J.G., Bowerman, W.W. 2007. Effect of In Ovo Exposure to an Organochlorine Mixture Extracted from Double Crested Cormorant Eggs (*Phalacrocorax auritus*) and PCB 126 on Immune Function of Juvenile Chickens. Arch Environ Contam Toxicol. 53(4):655-6153,

Levengood, J.M., Wiedenmann, L., Custer, T.W., Schaeffer, D.J., Matson, C.W., Melancon, M.J., Hoffman, D.J., Scott, J.W., Talbott, J.L., Bordson, G.O.,

Bickham, J.W., Rattner, B.A., and Golden, N.H. 2007. Contaminant exposure and biomarker response in embryos of black-crowned night-herons (*Nycticorax nycticorax*) nesting near Lake Calumet, Illinois. Journal of Great Lakes Research 33:791-805

Link, W.A. and Albers ,P.H. 2007. Bayesian multimodel inference for dose-response studies. Environmental Toxicology and Chemistry 26(9):1867-1872.

Little, E.E., Calfee, R.D., Theodorakos, P., Brown, Z.A., Johnson, C.A. 2007. Toxicity of cobalt-complexed cyanide to *Oncorhynchus mykiss*, *Daphnia magna*, and *Ceriodaphnia dubia*. Potentiation by ultraviolet radiation and attenuation by dissolved organic carbon and adaptive UV tolerance. - <http://www.springerlink.com/content/l04348787pr40r53/> Environmental Science and Pollution Research, 14(5):333-7

Long, E.R., Ingersoll, C.G., MacDonald, D.D. 2006. Calculation and uses of mean sediment quality guidelines quotients: A critical review. Environmental Science and Technology 40:1726-1736.

Longcore, J., Haines, T., and Halteman, W. 2007. Mercury in tree swallow food, eggs, bodies, and feathers at Acadia National Park, Maine, and an EPA Superfund Site, Ayer, Massachusetts. Environmental Monitoring and Assessment 126(1-3):129-143.

Longcore, J.R., Dineli, R., and Haines, T.A. 2007. Mercury and growth of tree swallows at Acadia National Park, and at Orono, Maine, USA. Environmental Monitoring and Assessment 126(1-3):117-127.

Lotufo, G., Nipper, M., Carr, R.S. and J. Conder, J. 2006. Fate and toxicity of explosives in sediments. In: Ecotoxicology of Explosives and Unexploded Ordnance, Sunahara, G.L., J. Hawari, G. Lotufo, and R. Kuperman (eds.), CRC Press Inc., Boca Raton, Florida, (in press).

March, F.A., Dwyer, F.J., Augspurger, T., Ingersoll, C.G., Wang, N., Mebane, C.A. 2007. An evaluation of freshwater mussel toxicity data in the derivation of water quality guidance and standards for copper. Environmental Toxicology and Chemistry 26:2066-2074

Maule A.G., Gannamb, L. and Davis,J.W. 2007. Chemical contaminants in fish feeds used in federal salmonid hatcheries in the USA. Chemosphere 67(7):1308-1315

May, T., Walther, M., Brumbaugh,W.G. 2007 Selenium Concentrations in Irrigation Drain Inflows to the Salton Sea, California, October 2006 and January 2007, USGS, Open-File Reports

May, T.W. and Brumbaugh, W.G. 2007. Determination of total mercury in fillets of sport fishes collected from Folsom Reservoir, California, 2006. U.S. Geological Survey, Open-File Report 2007-1078.

May, T.W., and Brumbaugh, W.G. 2007. Determination of total mercury in fillets of sport fishes collected from Folsom and New Melones Reservoirs, California, 2004. U.S. Geological Survey, Open-File Report 2007-1077.

May, T.W., and Brumbaugh, W.G., 2007. Determination of total mercury in whole-body fish and fish muscle plugs collected from the South Fork of the Humboldt River, Nevada, September 2005. U.S. Geological Survey, Open File Report 2007-1059.

McKernan, M.M., Rattner, B.A., Hale, R.C., and Ottinger, M.A. 2007. Egg incubation position affects toxicity of air cell administered polychlorinated biphenyl 126 (3,3,4,4,5-pentachlorobiphenyl) in chicken (*Gallus gallus*) embryos. Environmental Toxicology and Chemistry 26:(12)2724–2727

Mejia, F.H., Saiki, M.K., and Takekawa, J.Y. 2008, IN PRESS Relation between fish species assemblages and water quality characteristics in South San Francisco Bay salt ponds and sloughs, The Southwestern Naturalist

Melancon, M.J., Kutay, A.L., Woodin, B.R., Stegeman, J.J. 2006. Evaluating cytochrome p450 in lesser scaup (*Aythya affinis*) and tree swallow (*Tachycineta bicolor*) by monooxygenase activity and immunohistochemistry: possible nonlethal assessment by skin immunohistochemistry. Environmental Toxicology and Chemistry 25: 2613-2617

[Meyer, J.S., Suedkamp, M.J., Morris, J.M., Farag, A.M. 2006. Leachability of protein and metals incorporated into aquatic invertebrates: Are species and metals-exposure history important? Archives of Environmental Contamination and Toxicology 50: 79-87.](#)

Mills, G.A., Vrana, B., Allan, I., Alvarez, D.A., Huckins, J.N. and Greenwood, R. 2007. Trends in monitoring pharmaceuticals and personal-care products in the aquatic

environment by use of passive sampling devices. Analytical Bioanalytical Chemistry 387:1153-1157

Mora, M.A. 2008. Organochlorine pollutants and stable isotopes in resident and migrant passerine birds from northwest Michoacá'n, Mexico. Archives of Environmental Contamination and Toxicology in press

Mora, M.A., Montoya, A.B., Juergens, P.W., Lee M.C., Duarte, A.M., Salazar, R.R., Terrazas, A.L. 2008. Persistent Environmental Pollutants in Eggs of Aplomado Falcons from Northern Chihuahua, Mexico, and South Texas, USA. Environment International 34(1):44-50. Epub 2007 Jul 31.

Mora, M.A., Musquiz, D., Bickham, J.W., MacKenzie, D.S., Hooper, M.J., Szabo, J., and Matson, C.W. 2006. Biomarkers of exposure and effects of environmental contaminants on swallows nesting along the Rio Grande, Texas, USA. Environmental Toxicology and Chemistry 25:1574-1584.

Mora, M.A., Skiles, R.S., and Paredes, M. 2007. Further assessment of environmental contaminants in avian prey of the peregrine falcon in Big Bend National Park, Texas. Southwestern Naturalist 52:54-59

Mora, M.A., Taylor, R., and Brattin, B. 2007. Potential ecotoxicological significance of elevated concentrations of strontium in eggshells of passerine birds. The Condor 109:199-205

Morris, J.M., Farag, A.M., Nimick, D.A., and Meyer, J.S. 2006. Light-mediated Zn uptake in photosynthetic biofilm. Hydrobiologia. 571:361-371.

Morris, J.M., Nimick, D.A., Farag, A.M., and Meyer, J.S. 2005. Does biofilm contribute to diel cycling of Zn in High Ore Creek, Montana? Biogeochemistry, 76:(2)233-259

Mount, D.R., Highland, T.L., Mattson, V.R., Dawson, T.D., Lott, K.G., Ingersoll, C.G. 2006. Use of the oligochaete, *Lumbriculus variegatus*, as a prey organism for toxicant exposure of fish through the diet. *Environmental Toxicology and Chemistry* 25:2760–2767.

Newton, T. J., and Cope, W.G. 2007. Biomarker responses of unionid mussels to environmental contaminants, Farris, J.L., and Van Hassel, J.H., eds., Freshwater Bivalve Ecotoxicology: Boca Raton, CRC Press, p. 257-284.

Newton, T.J., and Bartsch, M.R., 2007, Lethal and sublethal effects of ammonia to juvenile *Lampsilis* mussels (Unionidae) in sediment and water-only exposures: Environmental Toxicology and Chemistry 26(10):2057-2065.

Nipper, M., Carr, R.S., and Lotufo, G. 2006. Aquatic toxicity of explosives. In: Ecotoxicology of Explosives and Unexploded Ordnance, Sunahara, G.L., J. Hawari, G. Lotufo, and R. Kuperman (eds.), CRC Press (in press).

Nipper, M., Carr, R.S., Biedenbach, J., MacFarlane, J., and Gschwend, P. 2007. Passive samplers as sediment surrogates in toxicity tests. ICES Annual Science Conference, Proceedings. Copenhagen, Denmark: International Council for Exploration of the Sea, ICES CM 2007/J:09, 3p.
<http://www.ices.dk/products/CMdocs/CM-2007/J/J0907.pdf>

Nipper, M., Carr, R.S., Biedenbach, J.M. and V.H. Garrison. 2008. Toxicity of African dust and related components to marine organisms. In: Marine Pollution: New Research, Nova Publishers ((In Press))

Nipper, M., Carr, R.S., Biedenbach, J.M., Hooten, R.L. and Miller, K. 2005. Fate and effects of picric acid and 2,6-DNT in marine environments: toxicity of degradation products. Marine Pollution Bulletin. 50:1205-1217.

Norberg-King, T.J., Sibley, P.K., Burton, G.A., Ingersoll, C.G., Kemble, N.E., Ireland, D.S., Mount, D.R., Rowland, C.A. 2006. Interlaboratory evaluation of the *Hyalella azteca* and *Chironomus tentans* short-term and long-term sediment toxicity tests. Environmental Toxicology and Chemistry25:2662-2674.

Papoulias, D.M., Chapman, D., Tillitt, D.E., 2006, Reproductive condition and occurrence of intersex in bighead carp and silver carp in the Missouri River: Hydrobiologia, 571(1): 355-360 (91467)

Pattee, O.H., Carpenter, J.W., Fritts, S.H., Rattner, B.A., Wiemeyer, S.N., Roylem J.A., Smith, M.R. 2006. Lead Poisoning in Captive Andean Condors (*Vultur gryphus*). Journal of Wildlife Diseases 42(4):772-779.

Pisani, J. M., Grant, W.E. and Mora, M. A. 2008, Simulating the impact of cholinesterase-inhibiting pesticides on non-target wildlife in irrigated crops. Ecological Modelling 210(1-2):179-192

Quinn, M.J., McKernan, M., Lavoie, E.T., and Ottinger, M.A. 2007. Immunotoxicity of trenbolone acetate in Japanese quail. *Journal of Toxicology and Environmental Health Part A* 70(1-2):88-93.

Rattner, B.A. and McGowan, P.C. 2007. Environmental contaminant hazards to avifauna residing in the Chesapeake Bay estuary. *Waterbirds. In Press.* 52 pp.

Rattner, B.A., and Ackerson, B.K. 2006, Contaminant Exposure and Potential Effects on Terrestrial Vertebrates Residing in the National Capital Region Network and the Mid-Atlantic Network 201 pp., National Park Service

Rattner, B.A., Golden, N.H., Toschik, P.C., McGowan, P.C., and Custer, T.W. 2008. Concentrations of metals in blood and feathers of nestling ospreys (*Pandion haliaetus*) in Chesapeake and Delaware Bays, *Archives of Environmental Contamination and Toxicology*, 54(1):114-122.

Rattner, B.A., McKernan, M.A., Eisenreich, K.M., Link, W., Olsen, G., Hoffman, D.J., Knowles, K.A. and McGowan, P.C. 2006. Toxicity and hazard of vanadium to mallard ducks (*Anas platyrhynchos*) and Canada geese (*Branta canadensis*). *Journal of Toxicology and Environmental Health. Part A*, 69:331-351.

Rattner, B.A., McKernan, M.A., Eisenreich, K.M., Link, W.A., Olsen, G.H., Hoffman, D.J., Knowles, K.A., McGowan, P.C. 2006. Toxicity and hazard of vanadium to mallard ducks (*Anas platyrhynchos*) and Canada geese (*Branta canadensis*). *Journal of Toxicology and Environmental Health Part A* 69:331-351.

Rattner, B.A., Franson, J.C., S.R. Sheffield, C. Goddard, N.J. Leonard, D. Stang, P.J. Wingate. 2007. Lead emanating from hunting, shooting and fishing sports: implications for management of biota by natural resource professionals and policy makers. Report to the American Fisheries Society and The Wildlife Society. 112 pp.

Rees, C.B., McCormick, S.D., Weiming, L. 2005. A non-lethal method to estimate CYP1A expression in laboratory and wild Atlantic salmon (*Salmo salar*). *Comparative Biochemistry and Physiology, Part C* 141:217-24.

Rhea, D.T., Harper, D.D., Farag, A.M., and Brumbaugh, W.G. 2006. Biomonitoring in the Boulder River Watershed, Montana, USA: Metal concentrations in biofilm and macroinvertebrates, and relations with macroinvertebrate assemblage. *Environmental Monitoring and Assessment* 115:381-393.

Richter, C.A., Birnbaum, L.S., Farabollini, F., Newbold, R.R., Rubin, B.S., Talsness, C.E., Vandenbergh, J.G., Walser-Kuntz, D.R., and vom Saal, F.S. 2007. *In vivo* effects of bisphenol A in laboratory rodent studies. *Reproductive Toxicology* 24:(2)199-224

Richter, C.A., Taylor, J.A. Ruhlen, R.L., Welshons, W.V., and vom Saal, F.S. 2007. Estradiol and bisphenol A stimulate androgen receptor and estrogen receptor gene expression in fetal mouse prostate mesenchyme cells. *Environmental Health Perspectives* 115(6):902–908

Schmitt, C. J. and Brumbaugh, W. G., 2007. Evaluation of Potentially Non-Lethal Sampling Methods for Monitoring Mercury Concentrations in Smallmouth Bass (*Micropterus dolomieu*). *Archives of Environmental Contamination and Toxicology* 53(1):84-95

[Schmitt, C. J., Brumbaugh, W. G. and May, T.W. 2007. Accumulation of metals in fish from lead-zinc mining areas of southeastern Missouri, USA. Ecotoxicology and Environmental Safety, 67\(1\):14-30](#)

[Schmitt, C.J., Brumbaugh, W.G., Linder, G.L., Hinck, J.E., 2006, A screening-level assessment of lead, cadmium, and zinc in fish and crayfish from Northeastern Oklahoma, USA: Environmental Geochemistry and Health, 28\(5\):445-71.](#)

Schmitt, C.J., Whyte, J.J., Annis, M.L., Roberts, A.P., and Tillitt, D.E. 2007. Biomarkers of metals exposure in fish from lead-zinc mining areas of southeastern Missouri, USA. *Ecotoxicology and Environmental Safety* 67:31-47

Sorensen, J. A., Kallemeyn, L.W. and Sydor, M. 2005. Relationship between mercury accumulation in young-of-the-year yellow perch and water-level fluctuations. *Environmental Science and Technology* 39:9237-9243.

Takekawa, J.Y., Miles, A.K., Schoellhamer, D.H., Athearn, N.D., Saiki, M.K., Duffy, W.D., Kleinschmidt, S., Shellenbarger,G.G., and Jannusch,C.A. 2006. Trophic structure and avian communities across a salinity gradient in evaporation ponds of the San Francisco Bay estuary. *Hydrobiologia* 567:307-327.

Thomas, M., Walther, M., Brumbaugh, W.G., 2006. Selenium Concentrations in Irrigation Drain Inflows to the Salton Sea, California, October 2006 and January 2007, USGS, Open-File Reports

- Tillitt, D.E., Cook, P.M., Giesy, J.P., Heideman, W., and Peterson, R.E. 2007. Reproductive Impairment of Great Lakes Lake Trout by Dioxin-Like Chemicals. In: DiGiulio, R.T. and Hinton, D.E. (eds) Toxicology of Fishes, Francis & Taylor Publishers, Washington D.C. (In Press)
- Vijayan, M. M., Iru, N., Maule A.G., and Jørgensen, E.J. 2006. Fasting Augments PCB Impact on Liver Metabolism in Anadromous Arctic Char. *Toxicological Sciences* 91(2):431-439
- Voltura, M. B. and French, J. B. 2007. Effects of dietary PCB exposure on reproduction in the white-footed mouse (*Peromyscus leucopus*). *Archives of Environmental Contamination and Toxicology* 52(2):264-269.
- vom Saal, F.S., Akingbemi, B.T., Belcher, S.M., Birnbaum, L.S., Crain, D.A., Eriksen, M., Guillette, L.J., Hauser, R., Heindel, J.J., Ho, S.-M., Iguchi, T., Jobling, S., Kanno, J., Keri, R.A., Knudsen, K.E., LeBlanc, G.A., Marcus, M., McLachlan, J.A., Myers, J.P., Nadal, A., Newbold, R.R., Olea, N., Prins, G.S., Richter, C.A., Rubin, B.S., Sonnenschein, C., Soto, A.M., Talsness, C.E., Vandenberg, J.G., Vandenberg, L.N., Walser-Kuntz, D.R., Watson, C.S., Welshons, W.V., Wetherill, Y., and Zoeller, R.T. 2007 Chapel Hill Bisphenol A Expert Panel Consensus Statement: Integration of Mechanisms, Effects in Animals and Potential to Impact Human Health at Current Levels of Exposure.
<http://www.environmentalhealthnews.org/newscience/2007/2007-0801bpaconsensus.pdf> *Reprod Toxicol.* 24(2):131-8
- Vyas, N.B., Spann, J. W., Hulse, C.S., Gentry, S. and Borges, S.L. 2007. Dermal Insecticide Residues from Birds Inhabiting an Orchard. *Environmental Monitoring and Assessment* 133(1-3):209-14
- Vyas, N.B., Spann, J.W., Hulse, C.S., Borges, S.L., Bennett, R.S., Torrez, M., Williams, B.I. and Leffel, R. 2006. Field evaluation of an avian risk assessment model, *Environ. Toxicol. Chem.*, 25, 1762-1771.
- Wang N, Ingersoll, C.G., Greer IE, Hardesty DK, Ivey CD, Kunz JL, Brumbaugh WG, Dwyer FJ, Roberts AD, Augspurger T, Kane CM, Neves RJ, Barnhart MC. 2007. Chronic Toxicity of Copper and Ammonia to Juvenile Freshwater Mussels (Unionidae). *Environmental Toxicology and Chemistry* 26:2048-2056

Wang, N., Augspurger, T., Barnhart, M.C., Bidwell, J.R., Cope, W.G., Dwyer, F.J., Geis, S., Greer, I.E., Ingersoll, C.G., Kane, C.M., May, T.W., Neves, R.J., Newton, T.J., Roberts, A.D., Whites, D.W. 2007. Intra- and Inter-Laboratory Variability in Acute Toxicity Tests with Glochidia and Juveniles of Freshwater Mussels (Unionidae). *Environmental Toxicology and Chemistry* 26:2029-2035

Wang, N., Ingersoll, C.G., Hardesty, D.K., Ivey, C.D., Kunz, J.L., May, T.W., Dwyer, F.J., Roberts, A.D., Augspurger, T., Kane, C.M., Neves, R.J., Barnhart, M.C. 2007. Acute Toxicity of Copper, Ammonia, and Chlorine to Glochidia and Juveniles of Freshwater Mussels (Unionidae). *Environmental Toxicology and Chemistry* 26:2036-2047

Ward, S., Augspurger, T., Dwyer, F.J., Kane, M.C., Ingersoll, C.G. 2007. Risk assessment of water quality in three North Carolina streams supporting Federally-endangered freshwater mussels (Unionidae). *Environmental Toxicology and Chemistry* 26:2075-2085

Wenning, R.J., Adams WJ, Batley CE, Berry WJ, Birge WJ, Bridges TS, Burton GA, Chapman PM, Douglas WS, Engler RM, Ingersoll, C.G., Moore, D.W., Stahl RG, Word JQ. 2005. Executive summary. In: Wenning, R.J., Batley G, Ingersoll, C.G., Moore, D.W., editors. 2005. Use of sediment quality guidelines and related tools for the assessment of contaminated sediments. Pensacola FL: SETAC Press, p. 11-38.

Wenning, R.J., Batley, G., Ingersoll, C.G., Moore, D.W., editors. 2005. Use of sediment quality guidelines and related tools for the assessment of contaminated sediments. Pensacola FL: SETAC Press, 783 p.

Wenning, R.J., Batley, G., Ingersoll, C.G., Moore, D.W., editors. Use of sediment quality guidelines and related tools for the assessment of contaminated sediments. Pensacola FL: SETAC Press, p. 497-556.

Wenning, R.J., Batley, G., Ingersoll, C.G., Moore, D.W. 2005. Introduction to the workshop. In: Wenning, R.J., Batley, G., Ingersoll, C.G., Moore, D.W., editors. 2005. Use of sediment quality guidelines and related tools for the assessment of contaminated sediments. Pensacola FL: SETAC Press, p. 1-10.

Wheelock, C.E., Eder, K.J., Werner, I., Huang, H., Jones, P.D. Brummell BF, Elskus AA, Hammock BD. 2005. Individual variability in esterase activity and CYP1A

levels in chinook salmon (*Oncorhynchus tshawytscha*) exposed to esfenvalerate and chlorpyrifos. Aquatic Toxicology 74(2):172-92.

Wiemeyer, J. A. Royle and M. R. Smith. 2006. Lead Poisoing in Captive Andean Condors(*Vultur gryphus*). Journal of Wildlife Diseases 42(4):772-779.

Wildhaber, M.L., 2006, The role of reproductive behavior in the conservation of fishes: Examples from the Great Plains riverine fishes: Conservation Behaviorist, 4(1): 15-19 (91443)

Wildhaber, M.L., Papoulias, D.M., DeLonay, A.J., Tillitt, D.E., Bryan, J.L., Annis, M.L. 2007 Physical and hormonal examination of Missouri River shovelnose sturgeon reproductive stage: a reference guide, Journal of Applied Ichthyology 23(4):382-401

Wildhaber, M.L., Papoulias, D.M., Delonay, A.J., Tillitt, D.E., Bryan, J.L., Annis, M.L., 2006, Development of methods to determine the reproductive status of pallid sturgeon in the Missouri River: Final Science Report to U.S. Fish and Wildlife Service, Bismark ND (91464)

Winger, P.V., Lasier, P.J., Seginak, J.T. 2006. Sediment Quality in the Chipola River, Florida. Report submitted to US Fish and Wildlife Service, Ecological Services, Panama City, FL.

Word, J.Q., Albrecht, B.B., Anghera, M.L., Baudo, R., Bay, S.M., Di Toro, D.M., Hyland, J.L., Ingersoll, C.G., Landrum, P.F., Long, E.R., Meador, J.P., Moore, D.W., O'Connor, T.P., Shine, J.P. 2005. Predictive ability of sediment quality guidelines. In: Wenning, R.J., Batley, G., Ingersoll, C.G., Moore, D.W., editors. Use of sediment quality guidelines and related tools for the assessment of contaminated sediments. Pensacola FL: SETAC Press, p. 121-161.

Yang, X. and Baumann, P.C. 2006. Biliary PAH metabolites and the hepatosomatic index of brown bullheads from Lake Erie tributaries. Ecological Indicators 6(3): 567-574.

Zhaa, J., Wang, N. and Ingersoll, C. 2007 Histological alternation and vitellogenin induction in adult rare minnow (*Gobiocypris rarus*) after exposure to ethynodiol and nonylphenol. Chemosphere 66(3) 488-495